

INDOT Active Bat Season Tree Removal Policy

According to the *Programmatic Biological Opinion (BO) for Transportation Projects in the Range of the Indiana Bat and Northern Long-Eared Bat* prepared by U.S. Fish and Wildlife Service (USFWS, 2018), tree clearing can only occur during inactive bat season. Currently, the inactive bat season is October 1 – March 31, however, a few portions of the state have modified dates for inactive bat season (i.e. karst or hibernaculum areas of the state). This is to avoid direct impacts to bats and bat habitat. According to the Programmatic BO:

Transportation projects frequently require the clearing of trees. Tree clearing can have a variety of impacts on bats depending on the quality, amount, location of the lost habitat, and the time of year of clearing. Transportation projects may contribute to a variety of stressors considered under this threat: temporary or permanent loss of roosts, loss of foraging and/or roosting habitat, loss of travel corridors, and degradation of foraging and/or roosting habitat. Tree removal can also result in injury or death to individual bats (particularly during spring when bats may enter torpor periodically and during the period when non-volant pups are present). Many transportation activities involve tree removal as a potential stressor to bats and their spring/summer/fall habitat resources. (USFWS 2018)

Project managers (PMs), designers, area engineers (AEs), and construction staff must comply with USFWS Avoidance and Minimization Measures (AMMs) and INDOT project commitment(s) to avoid tree removal during the active bat season. These AMMs and/or commitments can be found in the Commitments Database and Unique Special Provision (USP), and are explained in the project's environmental document.

As a matter of policy, INDOT programs projects with tree removal so that trees can be removed during the inactive bat season. Do not assume that permission for active bat season tree removal can be obtained from USFWS. Although USFWS may be able to work with INDOT to solve problems on individual projects, satisfying USFWS on the need for active bat season tree removal creates risks for the project's schedule and budget. Additional PE work undertaken to remove trees not specified in the contract is usually the responsibility of the contractor.

Process for requesting consideration of active bat season tree removal:

In general, the following USFWS conditions must be met to request active bat season tree removal:

- Restricted to 10 or fewer trees per project (not sites within the project)
- Within 100 feet of the existing road/rail surface
- Outside of documented roosting/foraging habitats or travel corridors
- Coordination must occur with INDOT Environmental Services Division (ESD) and USFWS

Step 1: Identify and evaluate trees proposed for removal:

The contractor or the contractor's consultant will submit the active bat season tree clearing request to the Project Engineer/Project Supervisor (PE/PS) who evaluates whether the active season clearing is necessary and coordinates with INDOT. For INDOT projects, coordination will occur with the appropriate INDOT EWPO District permit specialist. For LPA projects, coordination will occur with the appropriate INDOT District Environmental. The request must contain the following information: location of the trees proposed for removal (mark with colored ribbon in the project area), species and size of trees, condition

of the tree(s) (i.e. snag, exfoliating bark, large cracks/crevices), photographs of the trees, graphic(s) of the project area (include the location of the trees to be removed), and reason for requesting tree removal during active bat season. When the request is complete, INDOT will provide this documentation to USFWS, who will either concur that a habitat assessment and/or emergence survey can be completed, or require the removal be delayed until inactive bat season. This step may take up to a month to complete.

Step 2: Habitat assessment and/or emergence survey:

If USFWS concurs that a habitat assessment and/or emergence survey can be completed, a qualified biologist will need to complete the assessment/survey and prepare the documentation. INDOT has on-call availability if needed and additional costs will be billed to the project or contractor as appropriate. During the habitat assessment and/or emergence survey one of two outcomes will occur.

- The habitat assessment will conclude the trees are not likely to be preferred by bats.
- The habitat assessment will conclude the trees are likely to be preferred by bats and recommend an emergence survey.

If the trees are not likely to be preferred by bats, USFWS must concur with the habitat assessment to remove the trees. However, tree removal may need to occur within a specific time frame after USFWS concurrence. This will be determined on a case by case basis (i.e. tree removal must occur within 2 weeks after USFWS concurrence).

If USFWS believes that the trees are likely to be preferred by bats, they will require an emergence survey, which must be completed by a qualified biologist. If no signs of bats are observed the trees must be removed the next day. If bats are observed, the trees cannot be removed until inactive season.

A habitat assessment is completed for a specific location within a project and not for the project as a whole. So, if the project has multiple locations, there may be multiple outcomes received based on the information found during the habitat assessment. For example, if the contractor's request is to clear trees at five locations, tree clearing may only be permitted at two locations based on the habitat assessment.

The habitat assessment/emergence survey process can take anywhere from a couple of weeks to several months depending on the information received, the biologist's availability, and project complexity. In addition, the PE/PS and contractor will need to coordinate how additional costs will be covered. This will be dependent on the reason for the active bat season tree clearing request.

Step 3: Additional project documentation:

Depending on the results from the field investigation, the Endangered Species Act (ESA) Section 7 determination for listed bats may change from the previously approved environmental document(s). If concurrence is received from USFWS to clear trees during active bat season, the updated scope of the project and the Section 7 determination will need reevaluated and accurately updated in environmental document(s). At a minimum, this will likely include completing a reevaluation document to update the scope of the project and the Section 7 determination. Coordination must occur with the appropriate INDOT District Environmental or INDOT ESD to determine the updates needed for the environmental documentation. Please note, this step will be the contractor's responsibility to secure the changes to the project documentation for deviating from the project as let.

Risk: Timing

Changing the scope of the project and requesting tree removal during active bat season will create timing delays to the project. Following the USFWS Rangewide Programmatic Agreement and coordinating

appropriately with USFWS takes time. Currently, for one project to fully complete all steps outlined above requires anywhere from one month to six months.

Risk: Increased cost for project

Clearing trees during active bat season will increase the project costs. Currently, the estimated cost of hiring a qualified biologist to complete a habitat assessment includes labor costs, expenses, project location (travel time), habitat size, and the number of trees to assess. If an emergence survey is needed the 2020 cost estimate is approximately \$600/tree.

In addition to hiring a qualified biologist, mitigation may also be required to offset adverse impacts and promote the recovery of bat species. More information about the costs for participating in the In-lieu Fee program can be found here:

https://www.fws.gov/midwest/endangered/section7/fhwa/pdf/ILF_InstrumentINBA.pdf. Generally speaking, the cost to mitigate active bat season tree removal in 2020 is around \$19,000 per acre depending on location.

Risk: Not receiving concurrence or approval to remove trees and additional environmental documents

Depending on the USFWS records, project location, surrounding habitat, tree types to be removed, and the number of trees to be removed USFWS may not approve tree removal during active bat season. In addition, if bats are found in the trees or surrounding habitat during the habitat assessment and/or emergency survey, tree removal cannot occur during active bat season.